

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

(d) adding the selected textual programmatic entity to the displayed statement.

Claim 49. (Amended) An apparatus for supplementing an incomplete computer programming statement, comprising:

a display device automatically displaying an incomplete computer programming statement, the display device further displaying automatically, proximate to the display of the incomplete computer programming statement, a list of one or more textual programming entities;

an input device that receives user input selecting one of the textual programmatic entities displayed by the display device; and

a processor for automatically modifying the incomplete computer programming statement by adding to the incomplete programming statement the selected textual programmatic entity.

Please cancel **claim 18, 50, and 51** without prejudice.

REMARKS

In the application claims 1-3, 5-17 and 19-49 remain pending. Claim 4 has been previously canceled while claims 18, 50, and 51 are being canceled herewith. A new claim 52 has been added. Presently, claims 1-3, 5-17, 19-30 and 32-51 stand rejected. Claims 18 and 31 have been indicated to contain allowable subject matter.

This response is being submitted in accordance with 37 C.F.R. § 1.116(a). It is believed that the proposed amendments will place the claims in better form for consideration on appeal should such action be necessary. In

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

this regard, the applicants have amended the claims to place them in accordance with the requirements of 35 U.S.C. § 112. Additionally, the applicant has amended the claims by reincorporating therein subject matter that was presented in the claims as originally filed. For example, certain of the claims have been amended to incorporate the subject matter of claim 18 that was indicated to be allowable while other claims have been amended to more distinctly recite the real-time functionality of the invention earlier presented in connection with claim 2. Since no new matter has been added by these Amendments, it is believed that a further search on the part of the Examiner would not be required. Accordingly, the entry of this amendment and the reconsideration of the rejection of the claims is respectfully requested.

In the latest Office Action claims 14, 25, 26, 28, and 36-41 were rejected under 35 U.S.C. § 112 as being indefinite. In response, the applicants have amended these claims to ensure compliance with the requirement of form set forth in the Office Action. Believing that these amendments cure the noted informalities, the applicants respectfully request that this rejection now be withdrawn.

The Office Action has further indicated that Claims 1, 3, 5-7, 9, 10, 12-17, 19-30, 32, 33, 35, 36, 39-41, 43, 44, and 47-49 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Smith (U.S. Patent No. 5,485,618). Believing that the claims as now amended render this rejection moot, the withdrawal of this rejection is respectfully requested.

As amended, the claims more distinctly recite the ability to automatically generate help for a user in real-time to construct a programming language statement. In this regard, independent claim 1 now recites "automatically

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

generating a passive assist window" and "automatically removing the passive assist window." Independent claim 12 recites "in an automatic manner" and "automatically generated an assist window . . . that does not obstruct the programming language statement." Independent claims 33, 41 and 49 now recite "automatically."

In contrast to the invention as now recited in the claims, the prior art of record fails to disclose these elements of the amended independent claims. For example, the expression builder of Smith cannot be generated/initiated without the user specifically requesting the builder for each specific instance of use. Also in Smith, the current programming language statement is not included in the expression builder unless the user manually selects this option ("[T]he user invokes the Expression Builder by selecting (225) the text and choosing a 'Build Expression' menu choice" and "[i]f a target is selected(highlighted) . . . that expression will appear in the Expression Builder dialog as the expression to be edited", Smith Col. 8, lines 19-29). Therefore, since it is evident that Smith fails to disclose each and every element recited in the claims at issue as is required to maintain a rejection under Section 102, it is submitted that this rejection must be withdrawn.

Furthermore, independent claims 17 and 52 contain the limitations recited in claim 18. Since claim 18 was previously allowed, the applicant submits that the amended claims 17 and 52 should be allowed as well.

It is further submitted that the aforementioned claims would not be obvious under 35 U.S.C. § 103 in view of Smith either alone or combined with previously cited prior art. As discussed above, Smith fails to disclose, teach or suggest

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

the automation that is now positively set forth in these claims. For this reason, the applicant believes that a rejection of these claims as being obvious over Smith would be improper.

The Office Action further rejects claims 2, 8, 11, 34, 37, 38, 42, 45, 46, 50, and 51 under 35 U.S.C. § 103(a) as being unpatentable over Smith alone or in combination with Layman (U.S. Patent No. 5,263,174) or with Frid-Nielsen (U.S. Patent No. 5,740,444). In setting forth this rejection, the Official Action alleged, in regards to dependent claim 2, that even though Smith does not specifically disclose that a generating step is automatically performed in response to a change in the current program statement, Layman does disclose generating and displaying a list of selectable choices in response to the user typing letters. Therefore, the Official Action concluded that it would be obvious to one skilled in the art at the time the invention was made to combine the displaying technique for matching words of Layman with the expression builder of Smith in order to have a quick and simple way of entering terms without having to type the entire word. As this rejection may pertain to the independent claims as now amended, it is respectfully submitted that the cited references neither teach nor suggest the type of automation recited in the amended claims.

The claims as amended require that the assist windows themselves automatically appear as well as the information contained therein. For example, claim 2 recites "the generating step is automatically performed in response to a change in the current program statement." Part of the generating step is described in claim 1 as "automatically generating a passive assist window that contains said finite

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

set of programming language statement information." Additionally, the claims requires that the information in the assist window constantly change to react to the user input and provide new information whether it is to complete the current programming statement or to give the user general information about that particular statement or place in the program. This is set forth in the claims as "automatically determining an identity of input to the programming language editor by the user" and "determining a finite set of information related to the present programming language statement." This claimed feature provides the advantage of assisting the user without them inputting complete phrases or words. By way of example, if the user were to give an incorrect spelling of a partial statement, the application can determine the full statement even though there is a misspelled word. Finally, the amended claims also require identification of the elements of the programming language statement via an object identifier.

In contrast to the now claimed invention, the combination of Layman and Smith do not provide the equivalent functionality. Layman cannot automatically generate words if they are misspelled ("matching proceeds from left to right, selecting only items whose names begin with the letters so far typed", Layman Col.2, lines 55-57). Neither Smith nor Layman suggests automatically generating, displaying or updating information present in the main body of the programming language statement. Rather Layman specifically recites "the user must first give a command that either establishes a mode that causes a list to act in the narrowing search behavior described herein" (see Layman Col.3 38-41).

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

In summary, neither Smith, Layman, nor Frid-Nielsen suggest or provide any incentive to combine the teachings in the manner the Examiner has suggested in his rejection of the dependent claims under Section 103(a). Specifically, these references fail to teach or suggest the claims of automation in combination with the features described previously. Therefore, the applicants submit that the independent claims as now amended, and the claims that may depend therefrom are allowable, and, as such, it is requested that this rejection also be withdrawn.

The other references cited in the Office Action have been reviewed and the applicant does not believe that the disclosure contained therein either anticipates or renders obvious the invention as now claimed.

CONCLUSION

In view of the above amendments and remarks, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

In re Appln. Of Shulman et al.
Serial No. 08/863, 822

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

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By 

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